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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,151	02/15/2002	Robert A. Falk	OPMX-1-1007	3528

7590 11/28/2003

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EXAMINER

SOHN, SEUNG C

ART UNIT PAPER NUMBER

2878

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/077,151	FALK, ROBERT A.	
	Examiner	Art Unit	
	Seung C. Sohn	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s): _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **"the detector for detecting an electrical signal"** in claims 1-15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. It should be noted that the reference number 24 in Fig. 1 is a detector for detecting the beam of radiation, not for detecting an electrical signal.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. ***Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph,*** as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The "detector for detecting an electrical signal" in claims 1-15 was not

described in the specification. It should be noted that the detector 24 disclosed in Page 3, lines 22-23 is a detector for detecting a beam of radiation, not for detecting an electrical signal.

4. ***Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph***, as based on a disclosure which is not enabling. Real time focus, critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Referring to claims 1-15, it is unclear to one of ordinary skill in the art how a focusing signal based on the average power of the filtered electrical signal relates to real time focus of a scanning microscope.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. ***Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Price (Patent No. US 5,932,872).***

Referring to claims 1, 6 and 7, Price discloses in Figs. 1 & 4 the following elements of Applicant's claim:

a) a detector (110, i.e., image processor) for detecting an electrical signal from the scanning microscope (102) (Fig. 4, state 204, Col. 8, lines 20-23);

b) one or more bandpass filters for filtering the detected electrical signal, wherein the one or more bandpass filters are tuned to a desired range of frequencies (Fig. 4, state 206, Col. 8, lines 23-29); and

c) one or more power indicators for detecting and displaying average power (the sum of squares of image intensity) of the filtered electrical signal of a corresponding bandpass filter (Fig. 4, state 208, Col. 8, lines 29-34).

Referring to claims 2 and 8, it is essentially inherent that the bandpass filter comprises at least one of a low, medium, or high pass filter.

Referring to claims 3 and 9, Price discloses a focusing device (Fig. 1, 113, i.e., PIFOC controller) for generating a focusing signal based on the detected average power and focusing the scanning microscope based on the generated focusing signal (Fig. 4, state 212, Col. 8, lines 39-47).

Referring to claims 4 and 10, Price discloses that the focusing device automatically performs generating and focusing (Col. 8, lines 9-14).

Referring to claims 5 and 11, Price discloses that the scanning microscope is a confocal microscope (Col. 29, line 66 – Col. 30, line 17).

Referring to claims 12 and 14, Price discloses in Figs. 1 & 4 the following elements of Applicant's claim:

a) a detector (110, i.e., image processor) for detecting an electrical signal from the scanning microscope (102) (Fig. 4, state 204, Col. 8, lines 20-23);

b) one or more bandpass filters for filtering the detected electrical signal, wherein the one or more bandpass filters are tuned to a desired range of frequencies (Fig. 4, state 206, Col. 8, lines 23-29); and

c) a focusing device (Fig. 1, 113, i.e., PIFOC controller) for generating a focusing signal based on the filtered electrical signal and focusing the scanning microscope based on the generated focusing signal (Fig. 4, state 212, Col. 8, lines 39-47).

Referring to claims 13 and 15, Price discloses that the focusing device automatically performs generating and focusing (Col. 8, lines 9-14).

Response to Arguments

7. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung C. Sohn whose telephone number is (703) 308-4093. The examiner can normally be reached on Monday through Friday from 8:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (703) 308-4852. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

SCS

SCS
November 19, 2003


DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 280